UNITED STATES PATENT AND TRADEMARK OFFICE

NOTICE OF ALLOWANCE AND FEE(S) DUE

22971   7590   06/17/2009

MICROSOFT CORPORATION
ONE MICROSOFT WAY
REDMOND, WA 98052-6399

EXAMINER
FORD, GRANT M

ART UNIT	PAPER NUMBER
2442	

DATE MAILED: 06/17/2009

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/690,422	10/21/2003	Nancy Pettigrew	315547.01	3824

TITLE OF INVENTION: SYSTEM AND METHOD FOR ANALYZING AND MANAGING SPAM E-MAIL

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	YES	$755	$0	$0	$755	09/17/2009

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FEE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

PTOL-85 (Rev. 08/07) Approved for use through 08/31/2010.

PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), to: <u>Mail</u>   Mail Stop ISSUE FEE
Commissioner for Patents
P.O. Box 1450
Alexandria, Virginia 22313-1450
or <u>Fax</u>   **(571)-273-2885**

INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 5 should be completed where appropriate. All further correspondence including the Patent, advance orders and notification of maintenance fees will be mailed to the current correspondence address as indicated unless corrected below or directed otherwise in Block 1, by (a) specifying a new correspondence address; and/or (b) indicating a separate "FEE ADDRESS" for maintenance fee notifications.

CURRENT CORRESPONDENCE ADDRESS (Note: Use Block 1 for any change of address)

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Note: A certificate of mailing can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission.

Certificate of Mailing or Transmission
I hereby certify that this Fee(s) Transmittal is being deposited with the United States Postal Service with sufficient postage for first class mail in an envelope addressed to the Mail Stop ISSUE FEE address above, or being facsimile transmitted to the USPTO (571) 273-2885, on the date indicated below.

(Depositor's name)
(Signature)
(Date)

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10/690,422	10/21/2003	Nancy Pettigrew	315547.01	3824

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nonprovisional	YES	$755	$0	$0	$755	09/17/2009

EXAMINER	ART UNIT	CLASS-SUBCLASS
FORD, GRANT M	2442	709-206000

1. Change of correspondence address or indication of "Fee Address" (37 CFR 1.363).

❑ Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached.

❑ "Fee Address" indication (or "Fee Address" Indication form PTO/SB/47; Rev 03-02 or more recent) attached. **Use of a Customer Number is required.**

2. For printing on the patent front page, list

(1) the names of up to 3 registered patent attorneys or agents OR, alternatively,

(2) the name of a single firm (having as a member a registered attorney or agent) and the names of up to 2 registered patent attorneys or agents. If no name is listed, no name will be printed.

1 _____

2 _____

3 _____

3. ASSIGNEE NAME AND RESIDENCE DATA TO BE PRINTED ON THE PATENT (print or type)

PLEASE NOTE: Unless an assignee is identified below, no assignee data will appear on the patent. If an assignee is identified below, the document has been filed for recordation as set forth in 37 CFR 3.11. Completion of this form is NOT a substitute for filing an assignment.

(A) NAME OF ASSIGNEE   (B) RESIDENCE: (CITY and STATE OR COUNTRY)

Please check the appropriate assignee category or categories (will not be printed on the patent) :   ❑ Individual   ❑ Corporation or other private group entity   ❑ Government

4a. The following fee(s) are submitted:

❑ Issue Fee

❑ Publication Fee (No small entity discount permitted)

❑ Advance Order - # of Copies _____

4b. Payment of Fee(s): **(Please first reapply any previously paid issue fee shown above)**

❑ A check is enclosed.

❑ Payment by credit card. Form PTO-2038 is attached.

❑ The Director is hereby authorized to charge the required fee(s), any deficiency, or credit any overpayment, to Deposit Account Number _____ (enclose an extra copy of this form).

5. **Change in Entity Status** (from status indicated above)

❑ a. Applicant claims SMALL ENTITY status. See 37 CFR 1.27.   ❑ b. Applicant is no longer claiming SMALL ENTITY status. See 37 CFR 1.27(g)(2).

NOTE: The Issue Fee and Publication Fee (if required) will not be accepted from anyone other than the applicant; a registered attorney or agent; or the assignee or other party in interest as shown by the records of the United States Patent and Trademark Office.

Authorized Signature _____   Date _____

Typed or printed name _____   Registration No. _____

This collection of information is required by 37 CFR 1.311. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, Virginia 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

UNITED STATES PATENT AND TRADEMARK OFFICE

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EXAMINER
FORD, GRANT M

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Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)
(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 719 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 719 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

PTOL-85 (Rev. 08/07) Approved for use through 08/31/2010.

	Application No.	Applicant(s)
Notice of Allowability	10/690,422	PETTIGREW ET AL.
	Examiner	Art Unit
	GRANT FORD	2442

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to <u>Applicant's response dated 5/5/2009</u>.

2. ☒ The allowed claim(s) is/are <u>34-45,47-53 and 56-66</u>.

3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a) ☐ All   b) ☐ Some*   c) ☐ None   of the:

       1. ☐ Certified copies of the priority documents have been received.

       2. ☐ Certified copies of the priority documents have been received in Application No. _____ .

       3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the

         International Bureau (PCT Rule 17.2(a)).

    * Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.

5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.

    (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached

       1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.

    (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of

      Paper No./Mail Date _____.

    Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).

6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)

2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)

3. ☐ Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date _____

4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material

5. ☐ Notice of Informal Patent Application

6. ☐ Interview Summary (PTO-413), Paper No./Mail Date _____ .

7. ☒ Examiner's Amendment/Comment

8. ☒ Examiner's Statement of Reasons for Allowance

9. ☐ Other _____.

/Andrew Caldwell/
Supervisory Patent Examiner, Art Unit 2442

EXAMINER'S AMENDMENT

1.   An examiner's amendment to the record appears below. Should the changes

and/or additions be unacceptable to applicant, an amendment may be filed as provided

by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be

submitted no later than the payment of the issue fee.

2.   Authorization for this examiner's amendment was given in a telephone interview

with L. Alan Collins on June 11, 2009.

3.   The application has been amended as follows:

4.   Please do not enter claim amendments dated 5/5/2009.

5.   Please amend the claims as follows:

In the claims:

1-33. (Canceled)

34.   (Previously Presented) A dynamic email spam analysis and management system comprising:

a database including a plurality of spam rules, each of the plurality of spam rules having

attributes including a score;

a spam analyzer operable to process a log file received from each of a plurality of message switches, each message switch processing an email against each of the plurality of spam rules thus determining if the processed email will be marked as spam, and for each match between the processed email and each of the plurality of spam rules, each message switch creating an entry in its log file corresponding to the processed email and the matching spam rule wherein each entry includes the score from each matching spam rule, the spam analyzer operable to update the attributes of at least one of the plurality of spam rules in the database, the updating including modifying the score of the at least one of the plurality of spam rules, the updating based on statistics calculated from at least one of the log files, wherein the spam analyzer is distinct from each of the plurality of message switches, and wherein each of the plurality of message switches are software being executed on one of a plurality of mail servers; and

a select rules file including one or more select rules from the database of the plurality of spam rules, each of the one or more select rules being included in the select rules file based on its attributes, the select rules file being replicated to each of the message switches.

35.   (Previously Presented) The system of claim 34 wherein the spam analyzer processes each log file to determine how many times each of the plurality of spam rules was hit and accordingly updates the attributes corresponding to the each of the plurality of spam rules.

36.   (Previously Presented) The system of claim 34 wherein the attributes corresponding to each of the plurality of spam rules are updated to indicate how many times each of the plurality of spam rules was false-positive-hit.

37.   (Previously Presented) The system of claim 34 wherein one or more other select rules of the plurality of spam rules are retired, each of the one or more other select rules being retired based on its attributes.

38.   (Previously Presented) The system of claim 37 wherein the one or more other select rules have not been hit within a predetermined amount of time.

39.   (Previously Presented) The system of claim 34 wherein the select rules file further includes one or more new rules.

40.   (Previously Presented) The system of claim 34 wherein the spam analyzer calculates, based on information derived from the log file, how many times each of the plurality of spam rules was hit.

41.   (Previously Presented) The system of claim 34 wherein the attributes of each of the plurality of spam rules are modified to indicate how many times each of the plurality of spam rules was false-positive-hit.

42.   (Previously Presented) The system of claim 34 wherein the spam analyzer calculates, based on information derived from the log file, how many hits of each of the plurality of spam rules was determined to be for spam email messages and accordingly modifies the corresponding attributes of the each of the plurality of spam rules.

43.   (Previously Presented) The system of claim 34 wherein the spam analyzer calculates based on information derived from the log file, how many hits of each of the plurality of spam rules was determined to be for non-spam email messages and accordingly modifies the corresponding attributes of the each of the plurality of spam rules.

44.   (Previously Presented) The system of claim 34 wherein the score of one of the plurality of spam rules is modified manually.

45.   (Currently Amended) A dynamic email spam analysis and management system comprising:
        a message switch including a spam filter operable to receive an email message wherein the

message switch is one of a plurality of message switches that are each software being executed on one of a plurality of mail servers comprising a conventional server; and

a select rules file including a plurality of spam rules, each of the plurality of spam rules having attributes including a score, wherein the spam filter analyzes the email message to determine if the email message will be marked as spam wherein the analyzing includes creating an entry in a log file, the entry including the score from each of the plurality of spam rules that matches the email message, and wherein the message switch periodically communicates the contents of the log file to a central server and periodically receives an updated select rules file from the central server, the updated select rules file differing from the select rules file, and the updated select rules file becoming the select rules file once received, and wherein the central server is distinct from each of the plurality of message switches.

46.   (Canceled)

47.   (Previously Presented) The system of claim 45 wherein a total spam score for the email message is modified using the score of each of the plurality of spam rules for which there is a hit on the email message.

48.   (Previously Presented) The system of claim 47 wherein, if the total spam score exceeds a score threshold, the email message is identified as a spam email message.

49.   (Previously Presented) The system of claim 45 wherein each of the plurality of spam rules has attributes including one or more of: a date and time the spam rule was last updated, number of hits, number of spam hits, number of non-spam hits, and date and time of last hit.

50.   (Previously Presented) The system of claim 47 wherein, if the total spam score does not exceed a score threshold, the email message is identified as a non-spam email message.

51.   (Previously Presented) The system of claim 50 wherein the email message is transferred to an intended recipient.

52.   (Previously Presented) The system of claim 45 wherein each of the plurality of spam rules are constructed using regular expressions.

53.   (Previously Presented) A method for dynamically updating spam rules, the method comprising:

receiving an email message at a message switch wherein the message switch is one of a plurality of message switches that are each software being executed on one of a plurality of mail servers;

processing the email message against the spam rules to determine if the email message will be marked as spam, each of the spam rules having attributes including a score;

creating a spam information entry in a log file, the spam information entry including the score from each of the spam rules that the processed email message matches;

calculating statistics for the spam rules based on the spam information in the log file;

updating a database of the spam rules based on the statistics, the updating including modifying the score of at least one of the spam rules;

selecting a set of select rules from the database of the updated spam rules to form a select rules set; and

replicating the select rules set to the message switch wherein the select rules set, once received by the message switch, becomes the spam rules.

54-55. (Canceled)

56.   (Currently Amended) The method of claim [[55]] 53 wherein the processing includes testing the email message against each of the spam rules for a hit and, if a hit exists for the each of the spam rules, modifying a total spam score of the email message based on the score of the each of the spam rules.

57.   (Previously Presented) The method of claim 56 wherein the spam information entry corresponding to the email message in the log file includes an identifier for each of the spam rules for which there was a hit.

58.   (Previously Presented) The method of claim 53 wherein the calculating includes calculating, based on the log file, how many times each of the spam rules was hit.

59.   (Previously Presented) The method of claim 53 wherein the calculating includes calculating, based on the log file, how many hits for each of the spam rules were for a spam email message versus a non-spam email message.

60.   (Previously Presented) The method of claim 53 wherein the updating includes updating a quantity of false-positive-hits for one or more of the spam rules.

61.   (Previously Presented) The method of claim 53 wherein the selecting includes retiring one or more of the spam rules wherein the retired spam rules are not included in the select rules set.

62.   (Currently Amended) The method of claim [[55]] 53 wherein the updating includes updating the score of one or more of the spam rules based on the statistics.

63.   (Currently Amended) The method of claim [[55]] 53 wherein the score of each of the spam rules can be modified manually.

64.   (Previously Presented) The method of claim 53 wherein the replicating includes replicating the select rules set to each of the plurality of message switches.

65.   (Previously Presented) The method of claim 53 further comprising, if the email message is

determined to be a non-spam email message, transferring the email message to an intended recipient.

66.   (Previously Presented) The method of claim 53 embodied as computer-executable instructions

stored on a computer-readable medium.

Allowable Subject Matter

6.   Claims 34-45, 47-53, and 56-66 are allowed. For reasons for allowance, see

Office Action dated 2/5/2009. The rejection of claims 45 and 47-52 has been removed in

view of Applicant's instant amended claims and Applicant's statements made in

Applicant's response dated 5/5/2009.

7.   Any comments considered necessary by applicant must be submitted no later

than the payment of the issue fee and, to avoid processing delays, should preferably

accompany the issue fee. Such submissions should be clearly labeled "Comments on

Statement of Reasons for Allowance."

Conclusion

8.   Any inquiry concerning this communication or earlier communications from the

examiner should be directed to GRANT FORD whose telephone number is (571)272-

8630. The examiner can normally be reached on 8-5:30 Mon-Thurs alternating Fridays.

        If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Andrew Caldwell can be reached on (571)272-3868. The fax phone number

for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system. Status information for

published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a

USPTO Customer Service Representative or access to the automated information

system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Andrew Caldwell/
Supervisory Patent Examiner, Art
Unit 2442

/G. F./
Examiner, Art Unit 2442